

ver the three decades that I've hunted white-tailed deer in northeastern Montana's Milk River Valley, I've come to think of these mercurial big game animals as sharing many of the properties of water. These deer flow along paths of least resistance, sometimes inundating the landscape, other times becoming conspicuously, desperately absent.

Just as in times of drought and flooding, we tend to notice whitetails mainly when they're at one extreme or the other. In years of abundance, you'll see large herds in every riverside alfalfa field, and a distressing number on the shoulders of our roads, some struck by vehicles, other at risk of it. In times of decline, like after the deadly 2011 EHD (epizootic hemorrhagic disease) outbreak along the Milk River that killed 90 percent

BB AND FLOW White-tailed deer

populations experience high highs and low lows, influenced largely by winter

weather, drought, and other factors

peyond the control of wildlife managers.

scarce that one farmer friend would announce sightings of even a single survivor.

The idea of whitetails being special and rare is one that Montanans of an earlier generation would recognize. For much of the last century, at least in eastern Montana, whitetails were pushed to the wild margins by the sweep of settlement, as people cleared, leveled, and then irrigated river valleys and fenced the prairie. In those days, of the deer in that area, whitetails were so if you wanted to hunt a Montana whitetail,

vou went west, to the mountain forests where wary deer could be caught coming out of the doghair tangles of grown-over clear-cuts at dawn or dusk. Or maybe you hunted them in the upper benches of the few wildlife management areas the nascent Montana Fish and Game Department established in the foothills.

The return of whitetails to our farms, parks, and even towns-made possible largely with science-based hunting seasons and regulations and habitat conservation is one of those wildlife restoration success stories that hunters and biologists like to tell each other. We share less frequently the reality that, in many places, whitetails have grown so numerous as to become gardenand crop-destroying pests. "River rats," that same Milk River farmer calls them when populations bounce back, which they in-

Abundance and depletion are the nature of both water and whitetails. Graphs of Montana's whitetail populations in some regions over the last few decades resemble the seasonal hydrograph of a snowmelt stream (or the stock market), with steep peaks descending into low valleys. Wildlife managers, who like to see population graphs depicting gentle stair-stepping rises, admit the challenge of managing a species that responds less to hunting regulation changes and habitat manipulation and more to the increasingly unpredictable variations of weather and climate. Just like water.

That's the big picture of Montana's whitetails. But, as anyone who hunts them knows, the small picture is rich in tiny, significant details, defined by seeps and rivulets (to keep a metaphor alive). Which way is the wind blowing? Will breeding season lure a nocturnal buck into the daylight? When spooked, will whitetails come my way or race off onto the neighbor's place? Will that buck I've seen for two seasons be around for a third?

Those two stories—the large-scale population trends and the personal-sized pursuit of this twitchy trophy—are both required to understand why white-tailed deer are Montana's most variable big game animal.

BOUNDING BACK

White-tailed deer are native to much of the state. We find evidence in Native American artifacts, and we know that the only time Lewis and Clark's journals mention these animals by name was when the expedition camped for days at the mouth of the Marias River near modern-day Loma. The captains deviated from their usual description of "red" or "fallow" deer to write about seeing "great numbers of elk and white tale deer" on the lower Teton River.

And we know that whitetails largely disappeared from great swaths of the state as people cleared and settled the land and overharvested the wild ungulates for home or market consumption.

Vastly more interesting, at least to me as a hunter, is how whitetails have responded to modern land practices, and bounded back from depletion to now occupy the entire state, from the chokecherry draws and lentil fields of northeastern Montana to the

Andrew McKean, hunting editor of Outdoor Life, lives on a ranch with his family near Glasgow.

towering Bitterroot Range on the Idaho border. Agricultural changes-from the expansion of corn into the northern plains to whole townships planted to soil-holding CRP grasses in the 1990s-have boosted local whitetail populations. Equally fascinating is tracking how their fluid populations follow meteorological events.

"In northwestern Montana, weather drives our whitetail populations more than any other factor," says Neil Anderson, Montana Fish, Wildlife & Parks regional wildlife manager in Kalispell, who refers to a widely cited 2006 study of whitetails in the Salish

Montana white-tailed

deer distribution

1941

Mountains west of Kalispell. Researchers documented greater population declines, caused mainly by poor fawn survival, the longer that temperatures stayed below 10 degrees. Heavy snowfall, particularly when it stays on the landscape into March and April, is particularly brutal on deer and especially fawns, says Anderson.

To escape the snow of the high country and find what biologists call the "thermal cover" of low-elevation timber, northwestern Montana's whitetails commonly travel as far as 30 miles to winter range, adds Anderson. One study documented deer trudging 44 miles each way between Seeley Lake and winter habitat in the Goat and Squeezer creeks area.

"They really move during the tough winters, typically into the lower third of a mountainous area," says Anderson. "Interestingly, they don't travel all the way to the bottom of a river corridor, because that's where the coldest air settles. Instead, they find a little band of thermal cover on lower benches where trees shed snow and block wind and it can be a few degrees warmer than at both higher and lower elevations."

Those winter ranges can be so important to survival that whitetails will funnel in by the hundreds from surrounding mountain ranges. In one section of low-elevation timberland west of Kalispell, winter deer use is so intense that the herds graze planted Douglas-fir seedlings to the ground, along with most other vegetation. To Anderson, that's a grim indication the region needs to conserve denser conifer stands of core winter habitat to support the region's whitetail population.

1970 2021

COMEBACK After being nearly wiped out by settlers at the turn of the 20th century, whitetails have made a major comeback thanks to regulated hunting seasons that prevent overharvest and the species' ability to adapt to housing and other human developments.

SOURCE: MONTANA FWP

WINTER WEATHER

Whitetail trends track closely with severe winter weather across most of the species' northern range, but the correlation is especially consistent in the western mountains. In FWP's Region 1 (northwestern Montana), which has by far the state's largest whitetail population (and lowest mule deer population), the whitetail herd peaked in 1996, producing a regional harvest of 18,028 whitetails. But following the snowy, brutally cold winter of 1996-97, the harvest plummeted to just 5,845 for the 1997 season, reflecting a population decline. Since



AT HOME ABOUT ANYWHERE Today white-tailed deer thrive in a wide range of habitats, including (clockwise from above) canola and other agricultural crops, riparian areas, conifer forests, irrigated hay fields, and prairies dominated by taller grasses and forbs. Like coyotes and Canada geese, whitetails also prosper in many human-altered landscapes, including rural subdevelopments, leafy urban suburbs, golf course complexes, and recreation areas.









then, Region 1 deer numbers have climbed again in 2006 and 2016, followed by declines after harsh winters.

Montana wildlife officials note that whitetail populations don't stay down for long. Along with favorable weather, they're especially responsive to habitat changes, thriving in the disturbed edges of housing developments and in the thick brush that follows large-scale logging operations by a few years. Like coyotes and Canada geese, whitetails often thrive in developed landscapes.

"Once you start getting more fawns surviving and recruiting

into the population, after two or three years, when those deer start reaching reproductive age, you see a sharp population upswing," Anderson says. "When that increase starts, populations can grow pretty quickly if the winters stay mild."

Numbers of older, large-antlered buck numbers also start growing, though not at the same rate as the general population due to the physiological stress of the rut and mortality from hunter harvest.

Population elasticity is also the story of Montana's statewide whitetail population, which has averaged about 200,000 for the past two decades. Within that time frame, it's climbed as high as 265,000 and dropped



"When that increase starts, populations can grow pretty quickly if the winters stay mild."

winter of 2010-11, then began rising again. Montana's statewide mule deer population has grown from about 270,000 in 1999 to an estimated 328,000 in 2020 (after reaching nearly 400,000 in 2017). Though statewide numbers (and certainly local abundance) fluctuate, conditions have been more favorable for mule deer than most people may believe. Those similar trend lines defy a frequently cited theory that whitetails outcompete mule deer in their shared habitats.

rebounded, dropped again to

bottom out following the severe

as low as 170,000, says Brian Wakeling, SICK TO DEATH FWP's Game Management Bureau chief. In times of abundance, FWP issues more antlerless tags, then scales them back when populations dip. In FWP's Region 6 (northeastern Montana), where I live, the antler-

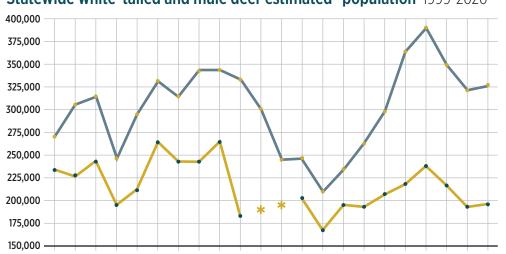
less harvest has ranged from about 3,000 (in 2009, just before the killer winter of 2011-12) to under 100 during the 2012 season. That's in a regional herd that in the last decade has been as high as 15,000 whitetails and as low as 6,000.

Montana's statewide mule deer numbers have followed roughly the same path as the whitetail population over the past 20 years, Wakeling says. Numbers dropped in 2002,

In addition to winter weather and habitat abundance, another whitetail population driver is disease. Especially in eastern Montana, where high whitetail densities can accelerate infection rates, local herds have nearly been wiped out by EHD. The virus is spread by biting midges, notoriously troublesome late in hot, dry summers that follow wet springs, says Melissa Foster, FWP wildlife biologist for the lower Yellowstone River region. "We have EHD outbreaks in our neck of the woods every year," she says. "Some are small and localized, and others are widespread and kill off a greater proportion of deer."

An epidemic in southeastern Montana's

Statewide white-tailed and mule deer estimated* population 1999-2020



1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020

* Derived from models using fawn:doe and buck:doe ratios and buck harvest, SOURCE: MONTANA FWI

Contrary to widespread belief, whitetailed deer in most areas are not displacing mule deer. The populations of both species have risen and fallen in tandem over the past 20 years.

 White-tailed deer Mule deer



Carter County last year spread from creek valleys near Ekalaka to the timbered highlands of the Long Pines, killing unknown hundreds of whitetails in just a few weeks last August. "It's terrible to lose that many animals so quickly-and right before hunting season," says Foster.

But despite high mortality in Carter County, the wildlife biologist suspects that whitetail numbers will bounce back in just a few years. That was the case with crippling EHD epidemics on the Milk, Musselshell, and lower Yellowstone rivers over the past decade.

More worrisome is the slower-moving but more per-

(CWD) affecting Montana's whitetails and mule deer. CWD is an always-fatal neurological deer disease that's been detected along Montana's Hi-Line, south-central counties, and the Libby and Ruby River areas. Once it infects the animals and soil of an area, it's impossible to eliminate. While only a few positive cases have been found in FWP's Region 7 (southeastern Montana), where Foster works, she acknowledges that FWP has not received many samples from the area. "It would not surprise me if it's out there on the landscape," she says of CWD on the lower Yellowstone. "It's in counties all around us, so we can assume it's just a matter of time before we find it here."

FIELD PERSPECTIVE

Because Montana's general deer license allows for either species of deer, hunters often respond to opportunity. I'm no different than a lot of mule deer hunters, who won't pass up an unanticipated buck even if it sports a white tail.

Hunting whitetails can be as variable as the deer themselves. You might encounter them close in a prairie coulee while you're stalking a mule deer, or bounding across a distant wheat stubble field, their signature tail waving bye-bye. You might sit all day in a treestand on an edge of an alfalfa field or forest clearing, waiting for whitetails to



"It's terrible to lose that many animals so quickly."

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two shed antlers together—"rattling"—during the rut to call in a buck looking to fight a rival. Maybe you track a deer through fresh snow, using tall timber to hide your pursuit.

Some of us hold out for a thick-antlered deer garden. mature buck. Others kill whitetail does for their mild meat. In years when the Milk River's whitetails are more visible and numerous than rabbits, my farmer friend practically begs hunters to come shoot whitetails and fill their freezers with lean

with bows, others with rifles, and now that Montana has a traditional muzzleloader season, you can expect more whitetails will be killed with flintlocks and percussion blackpowder firearms.

Several years ago, when manicured deer food plots were all the rage in the Midwest, I tried my hand at intensive whitetail land management on some property along the Milk River near Glasgow (legal in Montana when done in accordance with state statutes). I tilled the weedy edge of an irrigated alfalfa field and broadcast seeds of beets, hardy strains of turnips, and fast-growing winter rye. I raked the seeds into

manent risk of chronic wasting disease move from cover to feed. Maybe you crash the gumbo, making sure my little food plot got water along with the paying crops, and ordered a few treestands and trail cameras. I couldn't wait for archery season, when I'd arrow a wallhanger whitetail in my little

> When September arrived, my cameras showed deer stepping right over the leafy turnips and red-blushed beets to gorge on alfalfa that had been there all the while. It was a reminder that, when it comes to eastern Montana at least, whitetails go their own roasts and tender steaks. Some of us arrive way. Just like water. 📆



NOT A BAD CONSOLATION PRIZE Many hunters prefer mulies over whitetails, mainly due to the bigeared deer's larger body and antler size. But bringing a whitetail buck home is always an achievement, especially considering the species' elusive nature.

